

## **LISTING OF CLAIMS**

Claims 1- 57. **(cancelled)**

58. **(new)** An orthopedic implant assembly, comprising:

a screw retention member, having a bore formed therethrough, the bore having top and bottom ends connected by a passageway having a first diameter at the top end and a second diameter at the bottom end, a tapered retention seat being formed along an intermediate portion of the passageway, the tapered retention seat comprising an shoulder formed at a bottom thereof and a wall that monotonically decreases in diameter over a height thereof;

a frustoconical split ring, having inside and outside diameters that each decrease monotonically over a height thereof from a maximum diameter at a bottom, the split nature of the ring allowing expansion of the inside and outside diameters from a relaxed state; and

a fastener, comprising a shaft with a head at an end thereof, the head being generally spherical, with a bottom spherical portion, connected to the shaft, and a top spherical portion, the bottom and top spherical portions separated by a threaded section;

wherein the split ring is removably seated in the retention seat and rotating engagement of the threaded section of the fastener with the top inside diameter of the split ring lifts the split ring in the retention seat from a position below the fastener head to a position above the fastener head.

59. **(new)** The orthopedic implant of claim 58, wherein:

the shaft of the fastener is threaded from a second end thereof along a sufficient portion thereof to allow effective purchase of bone.

60. **(new)** The orthopedic implant of claim 58, wherein:

the screw retention member is integrally formed in a surgical implant.

61. **(new)** The orthopedic implant of claim 58, wherein:  
the screw retention member is a sleeve, adapted for fixation to a surgical implant.
62. **(new)** The orthopedic implant of claim 58, wherein:  
the retention seat is tapered frustoconically.
63. **(new)** A method for fastening an orthopedic implant to a bone, comprising the steps of:  
providing the orthopedic implant, the implant having a screw retention member formed within or secured thereto, the screw retention member having a bore therethrough, with a top and a bottom end of the bore connected by a passageway, the bore having a first diameter at the top end and a second diameter at the bottom end, an intermediate portion of the passageway having a frustoconical retention seat being formed therealong, the frustoconical retention seat comprising an shoulder formed at a bottom thereof and a wall that uniformly decreases in diameter over a height thereof, with a frustoconical split ring seated in the retention seat, the split ring having inside and outside diameters that each decrease uniformly over a height thereof from a maximum diameter at a bottom, the split nature of the ring allowing expansion of the inside and outside diameters from a relaxed state to an expanded state and allowing compression of the inside and outside diameters from the relaxed state to a compressed state;  
providing a bone screw, comprising a shaft with a head at a first end thereof, the head being generally spherical, with a bottom spherical portion, connected to the shaft, and a top spherical portion, the bottom and top spherical portions separated by a threaded section; a second end of the shaft adapted for threading purchase of bone;  
placing the implant with a bottom surface thereof on the bone, with the bore aligned with a desired point of entry into the bone;  
inserting the bone screw rotatingly into the bore, such that the shaft passes through the split ring and the second end of the screw begins to purchase the bone;  
continuing to rotatingly insert the bone screw, such that the increasing diameter of the bottom spherical section of the head engages a top edge of the split ring and

expands the split ring from the relaxed state into an expanded state, while maintaining and increasing bone purchase;

continuing to rotatingly insert the bone screw, such that the threaded section of the screw head engages the top edge of the expanded split ring and moves the top edge through the threaded section, again maintaining and increasing bone purchase; and

continuing to rotatingly insert the bone screw, such that the top edge of the split ring disengages the threaded section, and instead engages the top spherical portion, which then moves into engagement with a tapered inside wall of the split ring, wedging the split ring between the tapered retention seat wall and the top spherical portion, the taper of the retention seat acting to compress the split ring, preventing screw back out.